

2019

SECURITY ENVIRONMENT REVIEW



Belgian Defence

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"The liberty of the individual is guaranteed."

Constitution of the Kingdom of Belgium, Article 10.

"Enjoyment of the rights and freedoms recognized for Belgians must be provided without discrimination."

Constitution of the Kingdom of Belgium, Article 10.

"Everyone has the right to lead a life in keeping with human dignity."

Constitution of the Kingdom of Belgium, Article 23.

Introduction

In the midst of a secure and enlarging Europe, our country has enjoyed several decades of security and prosperity. After the fall of the Soviet Union, no major adversaries were able to threaten our security. For many years, the number of armed conflicts, incidents of violence, and refugees decreased. Over the last few years, however, as the charts on the following page show, there have once again been more wars, conflict casualties, and forcibly displaced people. Despite economic uncertainty, world military spending and the arms trade remain at the highest levels since the end of the Cold War and will continue to increase. The central question of this security environment review is whether we should indeed expect this long peace, this strategic pause, to be drawing to an end, and what the consequences could be for our society.

To make a proper assessment of what challenges us, we must first determine what we seek to secure. In the end, this can only be our way of life, characterized by some of the core values in our constitution: life, liberty, democracy, prosperity, equality, and human dignity. Many of these values are taken for granted, but they are increasingly contested inside and around our country. To uphold those values, our way of life, the armed forces play a critical role in guaranteeing the security of our citizens, upholding our country's freedom of action, securing vital infrastructure, and preserving strength vis-à-vis actors that challenge our key values and core political, economic and security interests.

This is the starting point and this is what we have to keep in mind whenever we take stock of our position in the world: how are we able to secure these core values and what is threatening them? This report reconstructs some important deep trends, takes stock of key security issues in different regions, but also evaluates to what extent we, our country and its partners, have also used the strategic pause to make our position more resilient. It looks behind and forward; inside-out and outside-in.

This security environment review, the first of its kind, has been prepared by the Belgian Armed Forces, benefited from the input of its different services and discussed with various external experts. It is meant to inform society, our sole stakeholder, to raise awareness of the international context and impact on our country. It is also expected to serve political decision-makers, to provide them with insights for making strategy and for discussions about the many decisions that will shape the future of our society.



Figure. Building blocks of power.

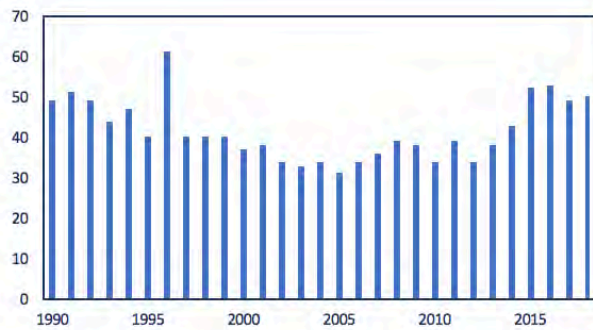


Chart. Number of armed conflicts in the world. Source: UCPD, estimation for 2018.

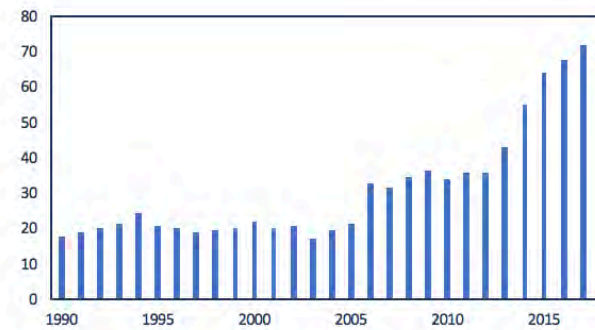


Chart. Number of forcibly displaced people (million). Source: UNHCR.

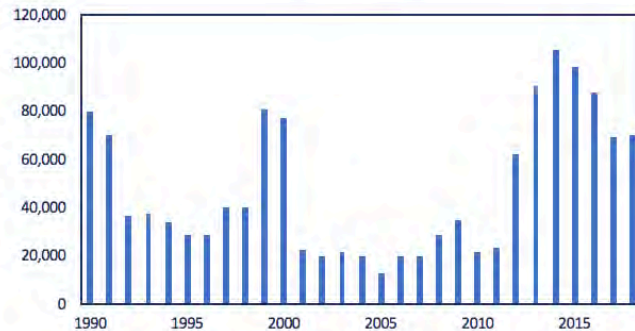


Chart. Battle-related deaths. Source: UCPD, estimation for 2018.

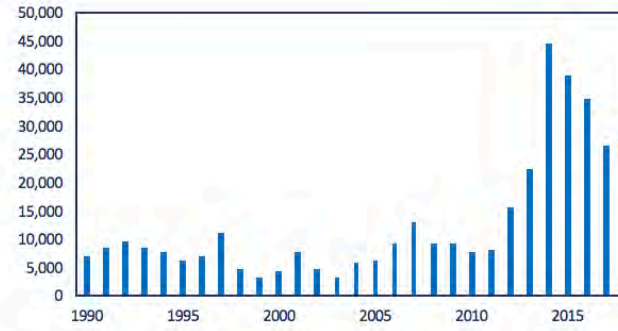


Chart. Casualties from terrorism. Source: GTD.

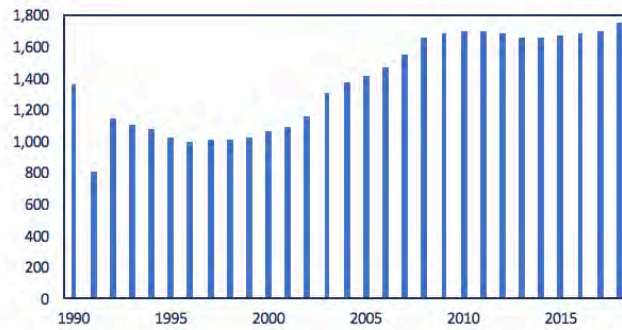


Chart. World military spending (constant US\$ billion). Source: SIPRI.

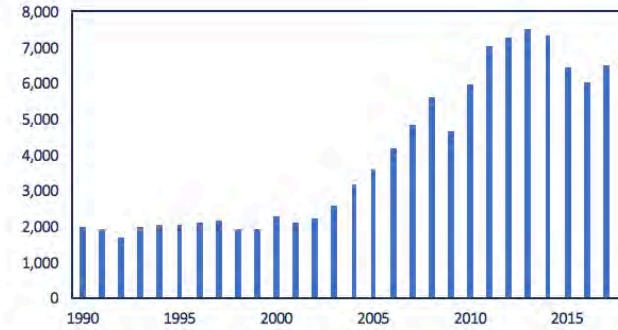


Chart. World arms trade (constant US\$ billion). Source: UNCTAD stats.

Deep trends

The restlessness of today's world is mainly caused by six deep evolutions: a profound shift in the balance of power, the explosion of data, efficiency gains in the economy, environmental distress, political fragmentation, and increasing lethality.

Trend 1: Power shift. It is undeniable that, over recent decades, power has shifted away from the Euro-Atlantic world. Our share of the global economy has decreased and that has led to a relative loss of political and military influence, of which the consequences are only starting to become clear. This power shift is not merely relative. Many citizens in Europe and the United States have been confronted with economic stagnation. The ending of the golden age of rapid growth of economic confidence, roughly between the mid-nineties and the most recent financial crisis, combined with the rise of new political, economic and ideological challengers renders more and more citizens uncertain – and sometimes angry. The European Union, the Western world, and their values, are on the defensive.

Trend 2: Data explosion: Sustained scientific progress in digital storage and energy devices, combined with growing investment, competition, and the development of large production facilities, is causing data technology to continue to become cheaper, smaller, and faster. Exponential has become the new incremental. This paves the way for more productivity gains through automation and because data networks can create markets of unprecedented scale. The difference between human and artificial will continue to fade, as wireless devices bring more data processing power to individuals, blend with the human body through exoskeletons and various sensors permanently track our emotions and behaviour. Key and disrupting innovation in connecting external data to bio-neural networks can bring the image of augmented humans or cyborgs closer to reality. The control of both the devices and the data will shape the distribution of power the same way as previous industrial revolutions did in the past.

Trend 3: More economic stress: What exacerbates uncertainty is the fact that societies struggle to handle new efficiency gains from automation and digitization. Whereas productivity gains should be a good thing, they also lead to greater difficulties in distributing wealth fairly. They do not always lead to gains in wellbeing and happiness. This in turn aggravates the feeling of economic injustice and has led to increased support for protectionism in several Western countries. But it also leads to problems in countries where a growing population also increases the search for jobs. So, despite technological gains, economic confidence does not always grow. The larger that gap between technological progress and social confidence becomes, the greater the risk of social instability, protectionist policies, and a retreat for globalization.

	1990	2000	2010	2018
GDP	33	27	26	20
Military expenditure	28	23	18	14
Manufacturing	37	24	22	19
High-tech exports	44	34	32	28

Table. EU28 share of world total (%). Source: WDI.

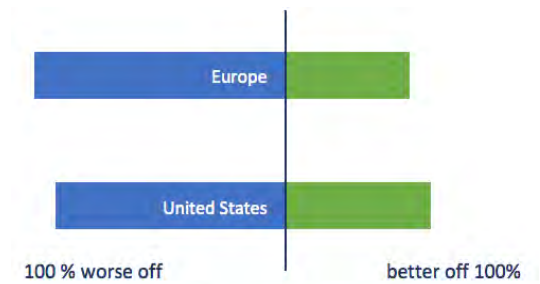
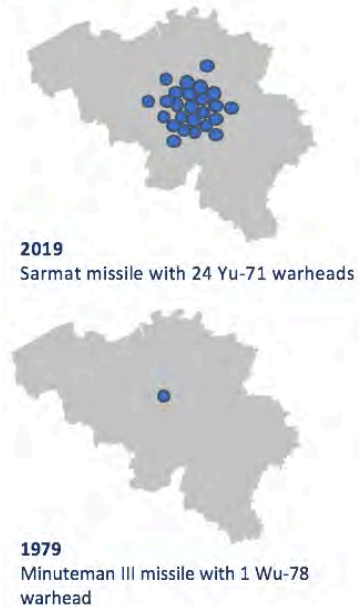


Chart. Will the next generation be better off than their parents? (%). Source: PEW, 2017.

Figure. Lethality: Hypothetical air blast radius for three different nuclear weapons.



Trend 4: More environmental stress: We also observe a gap between environmental challenges and the degree to which new technologies are used to combat them. As a result of poverty and bad governance, science and technology are often only applied slowly, to promote sustainable farming, for example, or to mitigate climate change and alleviate water scarcity. With world population set to rise from 7.6 billion in 2019 to 8.6 billion by 2030, this will cause enormous challenges. By 2030, Europe, with an ageing population below 500 million inhabitants, will sit amidst two vast landmasses. Over 4.7 billion people will live elsewhere in Eurasia and 1.7 billion people on the African continent, many of them in precarious environmental circumstances.¹ This will undermine the stability of states, incite more competition for natural resources, inside and between states, and enlarge intra- and trans-regional migration.

Trend 5: Political fragmentation: While there exists a need for international cooperation on the numerous economic, environmental, and security issues, synergy is thwarted by political fragmentation. There is political fragmentation inside and between countries. Internally, state structures are challenged, mostly through polarized voting by their own citizens, who have lost confidence. The result is often an awkward mixture of political fragmentation and nationalism, of actors seeking to weaken the state and state elites seeking to preserve it. It also thwarts cooperation across borders. Multilateralism, one of the pillars of Belgian foreign policy, is on the retreat. Global organizations are not being strengthened and often replaced by regional, plurilateral or bilateral initiatives.² International regulations and law are defied.

Trend 6: Growing lethality: Making that context more complicated is the growing lethality of weapons. The latest Russian intercontinental ballistic missile, for example, is able to carry a charge of more than 40 megatons, or 2,000 times the bomb dropped on Hiroshima. New conventional explosives can be much more powerful than traditional explosive materials; projectiles pierce the toughest armour. Combined with cheap delivery vehicles, this evolution compels our armed forces to adjust. Moreover, the erosion of Cold War arms limitation agreements, the vague doctrines of some nuclear powers, new kinds of missiles, and the growing importance of cyber and space mean that the line between strategic deterrence, premised on the capability of mass destruction, and other forms of warfare continue to blur.

These deep trends will not disappear. We expect them to have a far-reaching and lasting impact on our security. Equally, these trends will defy international partnerships and organizations, however much we as a small country have come to depend on them. This requires our country to maintain and enhance the capacity to reflect carefully upon the evolving security environment, to assess existing threats, and to anticipate new ones. But it also demands introspection, systematic monitoring and reporting on our country's position, including its vulnerability and strength. Preserving security starts with awareness of your own strengths and weaknesses.

Vulnerability at home

Belgium is a small yet rich country in the geographic heart of western Europe. It has the thirteenth largest population and the eleventh largest economy in Europe. It is one of the best countries to live in. The quality of life and wellbeing, as perceived by its citizens, is good. It is above the European average, yet still significantly below other countries of comparable size in north-western Europe, such as the Netherlands and Denmark.³ As regards important building blocks of national power, such as social cohesion, quality of governance, economic strength, and external resilience, Belgium performs averagely and less well than comparable countries such as Austria, Denmark and the Netherlands.⁴

Belgium remains the most globalized country in the world.⁵ Globalization has allowed our country to profit from foreign investment, access to foreign markets, and from its growing role as a centre of international governance. Yet, in a world of growing economic nationalism, this exposure also creates dependency and vulnerability. Foreign companies, for example, control around 47 percent of Belgian intellectual property and 55 percent of industrial production.⁶ As much as 76 percent of the energy we use depends on imports.⁷ This dependency is larger than in comparable European states.

Belgium depends heavily on the international market, but international actors are critical of the evolution of our country. On the one hand, international organizations praise assets, like our unique geographic position, relative high level of wellbeing, and education. Yet, on the other hand, the World Bank reports that the quality of governance, administration, and regulation has decreased and lags behind comparable countries.⁸ This was echoed by other institutions.⁹ Important organizations have stated that the productivity of our country remains behind its peers, that structural unemployment is high despite labour shortages in certain sectors, that public debt levels are still high, that there is underinvestment in infrastructure, and that progress on environmental issues has been too slow.¹⁰

The Federal Planning Bureau expects the economic situation to remain complex in the medium-long term, with slower growth in the Eurozone, a growing risk of deteriorating trade relations, and relatively slow economic growth in our country as a result.¹¹ Belgian citizens themselves are critical as well. Only 28 percent expect the future to be better. Trust in the government is below the levels in comparable countries, as is satisfaction about how our democracy works. Around 58 percent of citizens assess the economic situation to be good, while the average is above 75 percent in north-western Europe.¹² As much as one fifth of the population feels itself poor.¹³

	Be	Nl	Dk	At
GDP growth (%)	1,6	2,3	2,4	1,9
Foreign control energy sector (%)	51	33	1	3
Foreign control manufacturing (%)	55	50	29	39
Foreign control patents (%)	47	23	22	30
Energy import dependence (%)	76	52	12	64
Net income foreign investment (bn eur)	-11	36	6	1
Net exports of goods (bn eur)	0	15	67	2
Current account (bn eur)	-2	58	17	75
Government effectiveness (100 scale)	84	97	96	92
Political stability (100 scale)	63	80	76	86
Democratic performance (100 scale)	77	89	92	84
Innovation index (100 scale)	51	63	58	51

Table. Economic and governance indicators for Belgium and comparable European countries, the Netherlands, Denmark and Austria (average for the three last available years) *Source:* Eurostat, OSCE, World Bank, Economist Intelligence Unit, WIPO. *Notes:* Energy import dependence concerns the net imports divided by the gross available energy. The net income on foreign investment concerns the difference between FDI income inflows and outflows for all allocated sectors.

Less influence

Share of Belgium in European...	2008	2018
Defence Expenditures	2,1	1,8
Defence R&D expenditures	0,8	0,3
Troops in operations abroad	1,3	1,2
Economic production (GDP)	2,7	2,8
Population	2,1	2,2

Sources IISS Military Balance, Eurostat. Note
Operations abroad is outside EU (ex. Cyprus).

In terms of security and defence, this has important consequences. While international threats grow, economic fragility usually leads to frustration, unrest, and fragmentation at home. This is especially so when economic fault lines coincide with cultural divisions, as we have seen with the problem of religious extremism. But it also applies to society at large, as we have witnessed with the emergence of the Yellow Vests movement. And while economic uncertainty increases the need for a globalized country to preserve balanced economic partnerships, the relative decline of power will make it more difficult to shape relations with other countries. Even for small countries, power matters.

The weakening of Belgium's economic and political position makes wielding influence abroad less self-evident. This is of importance first of all in the European context. Belgium has lost relative economic power compared to most of its neighbours and has become increasingly dependent on those neighbours' investments and energy supply. Experts have also highlighted the disadvantage of this relative weakening and complex political structure in terms of diplomatic credibility. While Belgium has an interest in European cooperation, it often lacks sufficient financial resources to contribute to the implementation of European projects, which leads to unequal engagement, and insufficient political and administrative efficiency to respond quickly to challenges and opportunities in the European context.

In the domain of military affairs, this has led to an ambivalent situation. While the government has stated the need for a stronger European defence, the Belgian contribution to a solid European defence has decreased. Belgium counts for about 2.8 percent of Europe's GDP, but only represents 1.8 percent of total European defence spending. This share was still 2.1 percent in 2008. Belgium's share of European defence R&D dropped from 0.8 percent to 0.3 percent between 2008 and 2018. The share of troops in foreign operations has decreased from 1.3 percent in 2008 to 1.2 percent in 2018.

Limited resources also make it harder to participate in European defence equipment projects that might benefit the domestic industry. Already, the armed forces face difficulties in finding sufficient qualified personnel to guarantee that our country has a seat around the table for new important initiatives relating, for example, to the defence industry, to follow up on these initiatives, and to liaise with other domestic departments or industries. European cooperation can create opportunities, but it also demands significant investment in terms of human resources, particularly as presence also needs to be guaranteed in other contexts, such as NATO.

Greater constraints, greater responsibility

We should expect budgetary choices to remain difficult. While the necessity for sustained investment in security and defence becomes more pressing, there is also a need for investment in public infrastructure, from schools to energy, and an expectation by our citizens that their standard of living will be preserved. This makes it even more imperative to clarify the importance of the armed forces and how they provide security with a rather small budget. An average Belgian citizen still spends many times more on various luxury products, such as pet food and the lottery, than he/she contributes via taxes to the defence of the country.¹⁴ At times of financial scarcity, clear communication towards society is key.

Communication, however, is not enough. In a context of growing challenges and limited budgets, effectiveness is of the utmost importance. That requires the armed forces to strengthen their capacity to scan the security environment, to assess threats, and to explain very transparently its recommendations to the population and decision-makers. Effectiveness means sufficient means, clear priorities, leadership, professionalism, and cooperation wherever possible. This makes a genuine integrated security and defence strategy in which all actors seek excellence in their core business indispensable.

As the economic context will continue to be taxing, the armed forces are encouraged to explain not only how they use financial resources efficiently, but also how they contribute to the financial soundness of our country. Each euro spent on the armed forces is expected to protect 444 euros of economic interests: industrial infrastructure, trade, and so forth. But the economic context also compels the armed forces to become a catalyst of innovation, together with universities and companies. If our country seeks a return for expenditure on defence material, it needs to participate in its development.

Internal security challenges

Terrorism remains security threat number one for the majority of our citizens. The terrorist attacks of 2016 have exposed to our country the vulnerability of critical infrastructure and the fact that security threats do not stop at the border. Even if borders are closed, radical ideas and financing of terrorist groups continue to cross national borders. Besides the human casualties and the consequences in terms of social polarization, terrorist attacks have caused 2.3 billion euros in economic damage.¹⁵

"Each euro spent on the armed forces is expected to protect 444 euros of economic interests."

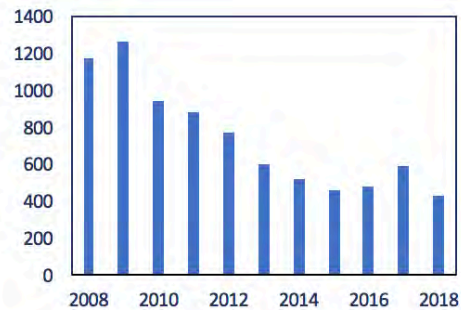


Chart. Participation of Belgian armed forces troops in foreign operations. Source: Belgian Armed Forces (excl. navy ships)

Since the terrorist attacks of 2016, no such major incidents have occurred. Yet the root causes of radicalism remain present. The economic, social and cultural divide between different groups in our society is still very large and could be exacerbated both by more economic uncertainty and security incidents. Islamic extremism and the terrorist attacks have clearly sparked a counter-reaction from rightist movements. Radicalism triggers radicalism. Even if the number of truly radicalized people is small, their influence spreads rapidly and the impact of new violent incidents can be devastating. As a result of the difficulty of constraining and preventing this phenomenon, it is likely that the armed forces will continue to have to play a role in protecting our society against extremist violence.

This underscores again that our country is in need of a more integrated security strategy that clearly identifies and divides responsibilities between different services from prevention, to early detection and intelligence, disruption, dissuasion, defence, prosecution and re-integration. The armed forces stand ready to protect our society and its citizens at all times. But, given the need for efficiency and the growing insecurity abroad, priorities need to be clear and emergency situations clearly defined and limited in time. Between 2016 and 2018, 3,246 soldiers participated in homeland defence; whereas only 1,947 could be deployed abroad. Soldiers did not expect to be deployed as policemen.

Still, in case of terrorist and other similar security threats at home, the armed forces are ready, as a last resort, to provide highly trained forces in support of the police. In addition, as the recent terrorist attacks highlighted, the expertise of the armed forces in handling and dismantling explosive devices are available in such circumstances.

The tenacity of terrorism and radicalization requires the armed forces to help contain them, in support of domestic security services. The military intelligence service, the General Intelligence and Security Service, is and will remain present in countries that are a breeding ground for terrorism. The military intelligence service, together with the Centre for Cyber Security and other departments, is tasked with building a basic capacity to guard the internet, with an eye on terrorism, misinformation and propaganda. It has a specific responsibility for monitoring information and propaganda wars waged by other states to the detriment of our national security and the core values enshrined in the constitution.

Belgian cities are very open and have depended on their openness to host important European and international organizations. The result of this, however, is that your cities are important targets for foreign infiltration, espionage and misinformation. Geopolitical rivalry and hybrid war, in which states often seek to advance their interests and influence through proxies in other states, will likely only increase this vulnerability. The military intelligence service will continue to support the State Security Service in this regard in tracking and answering such threats.

Economic security

Besides terrorism, the main concern of our citizens remains the state of the economy. The resilience of our national economy depends above all on entrepreneurship, creativity, sustainability and inclusiveness. The armed forces play an important role in this regard in preserving a secure environment in which entrepreneurs can flourish. We expect this contribution to become more important in a time of geopolitical and geo-economic turbulence.

With the rise of economic nationalism, aggressive industrial policy, and the desire of developing countries to rapidly modernize their militaries, there is also a rising threat of industrial espionage. Industrial espionage is estimated to have cost the European Union over one million jobs. It erodes our national economy's core advantage: brains and knowledge. As our economy thrives on many small yet highly innovative companies, some of them active in security-sensitive fields, this makes it more difficult to guard our scientific knowledge against intellectual property theft. The military intelligence service, through its capacity in cybersecurity, is ready to support other actors in combating industrial espionage.

The armed forces are indispensable to protecting economic lifelines. This applies to maritime trade. One major incident on the River Scheldt could cost our economy around 30 million euros per day; one major incident on a busy corridor in the North Sea could cost around 50 million euros per day. Navy patrol and mine countermeasure ships remain ready to deal with such disturbances. But the challenge to maritime trade is not confined to our littorals. Ports depend on access for shipping to some of the most insecure chokepoints in the Middle East and East Asia, and on seas that are contested by major powers. The Navy has been and will continue to be deployed to protect our maritime lifelines in distant seas and to contribute to international efforts to secure shipping. Moreover, our special forces have trained to intervene in case of threats to port infrastructure.

Each hour, about 36 international flights depart from or arrive at our national airports. About 8 of them cross Europe and come from or are bound for countries outside the European Union. Millions of citizens and billions in economic value depend on the security of our airports and international airspace. Our soldiers have helped secure airports. As air traffic above our country grows by five percent each year, fighter jets need to remain ready 24/7 to scramble whenever incidents occur. To guarantee the security of our airspace, the armed forces contribute to air traffic control and develop a capacity to identify and intercept drones. The downing of flight MH17 shows that civilian airlines are also vulnerable to the proliferation of advanced missiles. The armed forces will go on monitoring this threat and contributing to operations against armed groups that are or could become operators of surface-to-air missiles. Finally,


we see growing security risks in countries that are important for airlines operating from Brussels and thus consider the need to provide assistance whenever required.

Today, most citizens and companies trust that their data are secure, even though they are often channelled back and forth across the globe. Some of these data concern private information, some sensitive economic information, others financial transfers, as part of our financial wealth too has taken on the form of data on a server. Even though these data are encrypted, adversaries, state and non-state, are increasingly able to disturb data flows and even to crack their encryption. Electronic espionage, disinformation campaigns via social media, and cyberwarfare pose increasingly important threats to the resilience of our society. Military intelligence has the job of warding off cyber-threats, but with technology developing extremely fast this will become harder and harder. Furthermore, major powers are searching for the weakest spots in data infrastructures. For instance, special navy surveillance ships have been detected above cables on the seafloor and various countries have developed strategies to "blind and deafen" satellites.

It is not only goods and passengers that travel across borders, diseases and pandemics do so too. One of the tragic consequences of populations growing in poverty is that many megacities or densely populated rural areas in the South remain prone to outbreaks of pandemics. As the Ebola virus, for example, spreads in central Africa, the N7H9 flu is still far from exterminated in Asia. Meanwhile, global financial commitments to combat pandemics are not fulfilled and countries are reluctant to share information, which hampers an effective international response.¹⁶ Belgium has been commended for its capacity to respond to pandemics, to which the armed forces make important contributions, but several weaknesses in terms of our capabilities and internal coordination remain.¹⁷

Of all the countries in Europe, Belgium is the most dependent on external energy supply. Whereas increasing energy efficiency remains one of the best ways to limit this vulnerability, the armed forces are key in securing energy lifelines. The Belgian Pipeline Organization not only secures oil and kerosene supplies through Europe in times of crisis, but also supplies strategic facilities like airports throughout. With 800,000 families now depending on offshore wind energy, the protection of cables on the seafloor will become increasingly important. Despite the push for renewable energy, our country will still rely on the supply of fossil and nuclear fuel from unstable regions, which compels our armed forces to contribute to the protection of external sources and corridors of supply, and the stability and prosperity of relevant countries.

 **Rebel-held anti-ship missiles:** C-802 missiles are supposed to be held by armed groups in Yemen and Lebanon.

 **Rebel-held surface-to-air missiles:** Non-state groups operate short-range missiles in Libya, Lebanon, Iraq, Syria, and other countries. Such missiles can threaten planes that take off or land. More advanced missiles are used in Eastern Ukraine, Yemen, and Lebanon.

 **Non-NATO surveillance ships** detected above underwater telecommunication cables.

 **Piracy threat**

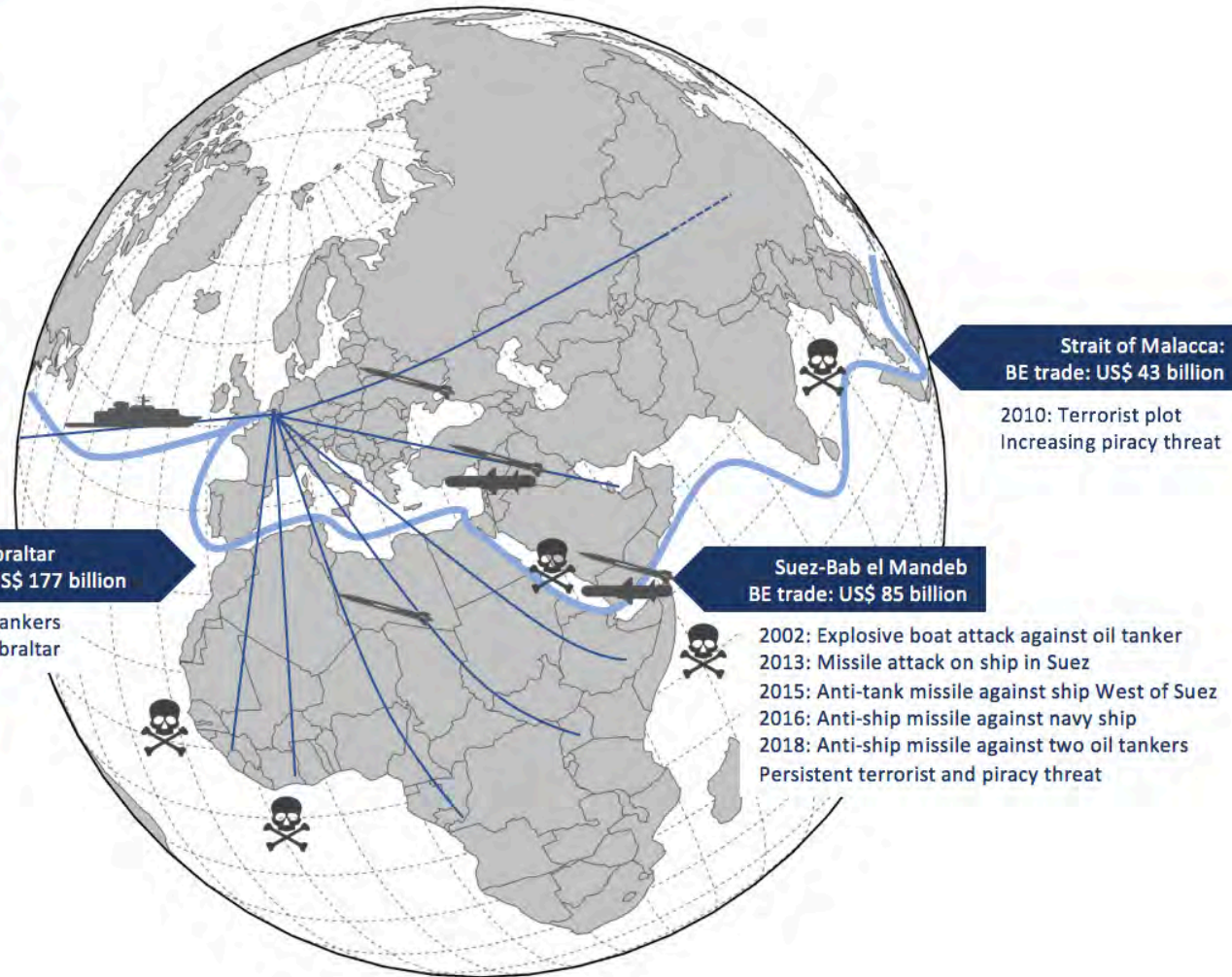


Figure: Overview of security threats to key economic lifelines.

Europe

"Belgium risks finding it more difficult to influence European initiatives and contributing to possibilities of collective security that make our citizens secure."

Whereas we have long taken European integration as a given, the European project has lost traction and that has major consequences for the position and security of our country. The European Union is a project of geopolitical importance. It seeks to preserve the peace between the large member states, with the bloodshed of previous centuries in mind. It is meant to be a check against dictatorship, considering the oppression of the Soviet regime and undemocratic regimes in southern European countries in more recent history. It is also supposed to uphold some of the core values promulgated in our constitution. Moreover, European integration is crucial to lowering the costs of trade with our main partners. Any setback in European cooperation would be to the detriment of our national interests and values.

But Europe is not a given. One of the problems of the European project is that, while it still has the quiet support of around half of the population, it faces a much more vocal opposition of about one third of the population that is sceptical. In some countries, like the United Kingdom, such scepticism has been historical. In other countries, negative attitudes have been exacerbated by a combination of economic distress, the distance between the European institutions and citizens, Eurosceptic populism, and the difficulty in managing the migration crisis.

Either way, Europe remains fragile. Even if the Eurozone has recovered after the crisis, internal imbalances are still large, purchasing power and private sector employment have only grown slowly, and Member States are reluctant to make it stronger. Eurosceptic parties have gained ground and increasingly organize themselves across borders, while mainstream parties have also become more reticent to deepening European unity and are challenging cohesion with more nationalistic economic policies and free-riding. The same goes for migration. Since 2015, flows of refugees and immigrants have become significantly smaller, but the problems that remain with regard to external border control, reception, and integration might go on to fuel Euroscepticism.

The contribution of our country to European defence and security has decreased to the point that questions can be asked about Belgium's compliance with key stipulations of treaties, such as Article 42(3) of the Treaty on European Union, which requires Member States "to improve their military capabilities" and to make them available for common security and defence policy. If our economic production is 2.8 percent of the European total, defence spending was 1.8 percent in 2018 and the share of total European troop deployments 1.2 percent. Compared to 2008, these shares have decreased. Both in the context of NATO and the EU, as well as in bilateral partnerships, our country has been urged to do more. Should this not change, Belgium risks finding it more difficult to influence European initiatives and contribute to possibilities for collective security that make our citizens secure.

Europe's internal stagnation and fragmentation risks accelerating the region's relative decline with respect to the world's main powers. Not only has its economic production hardly grown in absolute terms since 2009; its share in world economic production has decreased from 27 to 20 percent in the last ten years. Its share in high-tech exports shrank from 35 to 28 percent during the same period. The challenge for Europe will be to preserve its power in a world that has become much more competitive, with an economy that is no longer so productive and a population that will continue to shrink. By 2030, Europe will probably only represent 6 percent of the world's population, with about 40 percent of that population being over 50 years old.

Its share in global defence spending has dropped to 14 percent. In absolute terms, European Member States' defence spending decreased by about US\$ 60 billion between 2008 and 2018. During the same period, defence spending by the countries in Europe's neighbourhood, including Russia, Turkey, and Saudi Arabia, increased by US\$ 45 billion. European defence budgets are expected to increase, albeit slowly, and depending on economic conditions. And despite these increases, force levels are set to continue to fall, in terms of military personnel, as well as major systems, such as surface combatants and fighter jets. As a result, as shown in Kosovo and Libya, European countries are not able to conduct large-scale military operations independently.

Despite growing public and political concern about Europe's lack of innovation in key military technologies, the United States still spends ten times as much on defence-related research and development each year, China four times as much.¹⁸ In critical domains, like cyber and space, as well as the application of artificial intelligence, certain missile technologies and electronic warfare, the European Union will find it increasingly difficult to preserve its capacity on par with certain major powers.¹⁹ Recent initiatives like the European Defence Fund (EDF) and the Permanent Structured Cooperation (PESCO) are a first step forward but likely not sufficient to catch up.

The relative weakening of the European Union has important consequences for our country. More political and diplomatic efforts will be required to understand and respond to challenges and changing alignments between Member States. As a result of the relative weakening of Europe, Member States might be more inclined to advance external partnerships with other powers, which might undermine cohesion further. The European Union will continue to be obliged to respond to different kinds of security threats on different parts of its border at the same time. The more it fails to do so, the more its internal legitimacy will erode. With the current commitments and given the budgetary uncertainty, we cannot take for granted that European countries will succeed in rebalancing the Transatlantic Partnership and make a greater contribution to NATO, which affects the resilience of this alliance.

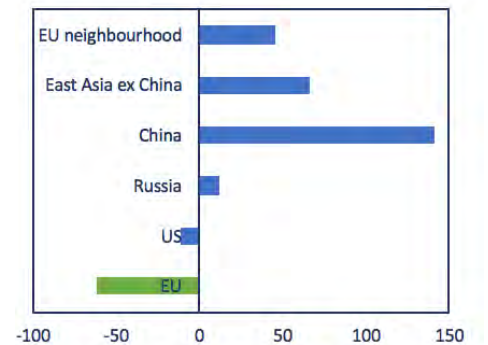


Table. Change in military expenditures between 2008 and 2018 (US\$ bn). Source: SIPRI.



Photo: Russian and Chinese troops in a joint exercise in 2018. Credit: NATO.

Neighbourhood

The weakening of Europe has diminished its presence and influence in its neighbourhood at a moment that instability around Europe is on the rise. Europe has become less important as a trade partner to many countries in the vicinity. Countries like China, Turkey, and the Gulf States have become an alternative investor. European development aid, while still being the largest, has been stagnant and challenged also by large volumes of loans from new creditors. As a result, many countries surrounding Europe have diversified their foreign policies away from Europe.

In this regard, a growing contradiction is emerging between, on the one hand, the expectations of European countries towards neighbouring states to help manage challenges like migration, terrorism, and armed conflicts and, on the other hand, their ability to preserve Europe's position as a credible partner and a security provider. The isolationist tendency in certain European countries could confirm the image of Europe vacating certain parts of its neighbourhood and embolden others to fill the potential void.

While European defence spending has decreased, the spending levels of our neighbours have increased. Consequently, while European countries are experiencing more difficulties in contributing to operations in the neighbourhood, other powers are using their military power more assertively – inside, around, and beyond their borders. As Europe's capabilities of projecting military force have decreased, external powers such as China have stated the objective of increasing their presence in Europe's neighbourhood, especially in the Mediterranean, but also in the Atlantic Basin, potentially via the Arctic Sea.

The north-east

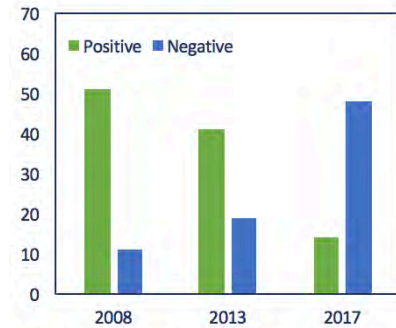
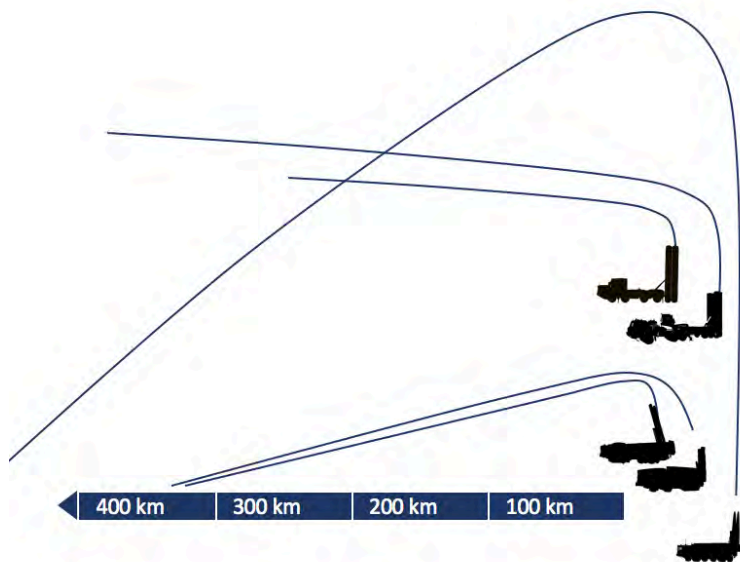


Chart. Russian views of the European Union (%). Source: Globescan.

The Arctic Sea is transforming from a strategic backwater into a key arena of competition. Efforts towards multilateral cooperation have had modest results. With the melting of the ice, the Arctic Sea will become an important gateway to the Atlantic Basin, both for traders and for soldiers. The Arctic is important for the security of satellite communication, nuclear deterrence, and conventional force projection. In addition, it plays a role for powers, such as China and Japan, to diversify maritime shipping. In fact, a new competition seems to have started for dominance in the whole maritime belt around Eurasia – thus including the Arctic.

One of the countries that is rapidly increasing its military presence in the Arctic is Russia. By population, Russia remains Europe's largest country and biggest military spender. But its economy only ranks fifth and its population is stagnant. The strategy of the Russian government is to protect sovereignty and to advance its influence with a combination of relatively low-cost anti-access and area-denial measures, the use of proxies in other states, robust strategic deterrence, and other means. While it has long since abandoned the no-first-use principle in nuclear deterrence, it has created uncertainty about also using nuclear weapons to retaliate in conventional conflicts – "escalate-to-de-escalate" – and has developed several weapon systems that can be both tactical and strategic. This compels countries like ours to reflect upon the repercussions for the nuclear posture of NATO and partner countries. While tensions have somewhat abated since the Crimean Crisis and the downing of flight MH17, Russians are sceptical of a detente with the West and Russian public distrust of the US has increased significantly. The result is enduring ambivalence. While trade with Europe is significant, distrust and military competition remains.

These tensions have repercussions for stability in our common neighbourhood, including the Baltic Sea, Belarus, Moldova, Ukraine, and the Black Sea. Most of these countries are poor and weak, and, as a result, nervously try to balance between Russia and the West. The balance of power remains precarious. Eastern European Member States are worried about Russian A2AD-bubbles (anti-access and area-denial) in the Baltic and Black Sea. From Crimea and Kaliningrad, sophisticated air-defence and anti-ship missile systems have been deployed. They can limit the freedom of movement of and threaten assets near Russia, above international waters, but also inside the borders of European Member States. Russia is also deploying a series of small new navy ships and aircraft equipped with advanced missiles. As a result, eastern European Member States are keen on a larger NATO presence, which in turn makes the security dilemma with Russia more pressing.



S-300: Air-defence system with a range up to 250 km.

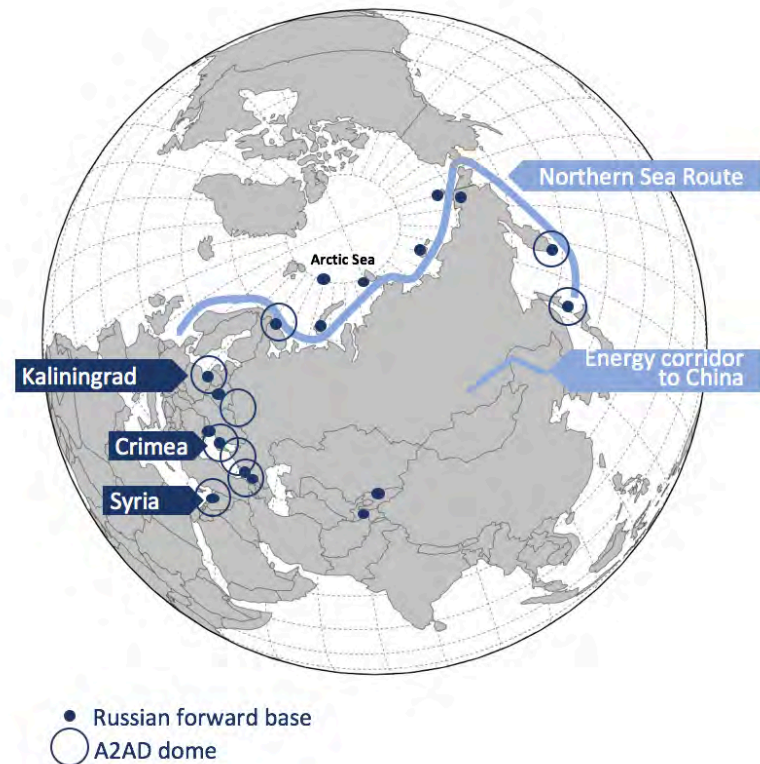
S-400: Air-defence system with a very powerful anti-stealth radar and missile with a range up to 400km.

Bastion: Heavy supersonic anti-ship missile with a range up to 350 km.

Kalibr 3M-54: Supersonic anti-ship missile with a range up to 330 km.

Iskander-M: Road-mobile ballistic missile with a range of 50 to 500 km, designed to evade air defense systems.

Over recent years, Russia has deployed increasingly advanced weapon systems to deny access and to counter adversaries on and beyond its borders. These consist of a combination of powerful radar systems, naval mines, highly sophisticated systems for electronic warfare, a series of relatively new warships equipped with various long-range missiles, modern fighter jets, as well as land-based road-mobile missile systems. These systems add up to a A2AD dome that not only covers Russian territory. It also covers large parts of the territory of European member states, international seas, and international airspace. The A2AD domes around the exclave of Kaliningrad, on the Baltic Sea, and on the Crimea, on the Black Sea are two notable examples. They are a cost-effective way for Russia to keep the regional military balance tilted to its advantage.



● Russian forward base
○ A2AD dome

Figure: Russian anti-access and area denial (A2AD) domes

Eastern Mediterranean

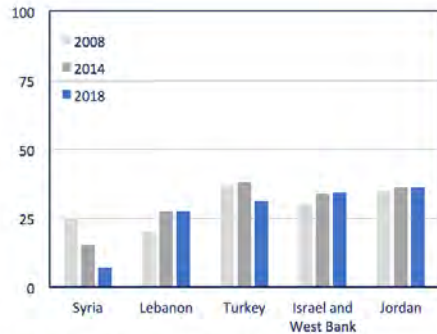


Chart. State stability (on a scale of 100). Source: Calculations based on FSI.



Chart. State stability (on a scale of 100). Source: Calculations based on FSI.

Beyond the Black Sea, in the Balkans, the European Union has played a crucial role in stabilizing the region after the violent collapse of the Republic of Yugoslavia. Decades of European engagement have helped prevent violence from rekindling. But a combination of poverty, protracted ethnic tensions, and fragile democracy mean that stability in the region is far from firm. Despite progress, for instance, in relations between Greece and the newly renamed Republic of North Macedonia, the situation remains sensitive in Bosnia-Herzegovina, Kosovo, and between Kosovo and Serbia. Against the backdrop of relatively young, fragile states, organized crime is widespread and so is competition for influence by regional powers.

Onwards, in the eastern Mediterranean, Turkey is an ambitious yet vulnerable regional power. Its population is growing, but it is marred by economic fragility and internal tensions. Despite its role in managing refugee flows, its strategic importance as a gateway to Asia, and large trade volumes, Turkey has been diplomatically estranged from Europe and politically entrenched into strong presidential leadership. Moreover, in Turkish strategic thinking, Europe, as a result of its military weakening, does not figure as an important strategic actor. Hence, we should expect no improvement in the territorial disputes in the Aegean Sea, the Cyprus question, and the competition for energy reserves in the eastern Mediterranean seabed.

In the Levant, Syria remains a smouldering conflict, with frequent eruptions of fierce violence, as a result of factionalism, the enduring presence of terrorist groups, and the interference of regional powers. As much as the Syrian War was driven by internal tensions, rivalry between regional powers make a new status quo improbable, with a risk that insecurity broadens into Lebanon, Turkey and other countries. The security situation is rapidly worsening in the Palestinian Territories; Israel's attitude to defending its national security is hardening. Islamic terrorism is far from vanquished.

Southern Mediterranean

In the Mediterranean, Europe has been focused on the flows of migration and refugees. These flows will not disappear, as conflicts around the Mediterranean remain rife, large numbers of people live in poverty, and climate change makes living conditions more difficult. Without major mitigation measures, climate change and urbanization will lead to agricultural output in the southern part of the Mediterranean stagnating or decreasing. At the same time, the Mediterranean is again a theatre of great power competition, with, besides the traditional US presence, Russia seeking to maintain its military facilities in Syria and China readying to back its New Silk Road with more frequent naval deployments and other military engagements. While challenges grow and external powers are moving in, southern European Member States see their security capabilities constrained by economic difficulties.

Egypt is the pivot between Africa and the Levant, and its Suez Canal is a vital trade route on which our energy security and maritime trade depends. With a population set to rise to 160 million by 2050 and considerable energy deposits found offshore, it has the potential to become a regional power. Stability has largely returned after the 2011 uprising, but at the expense of political liberty and masking economic problems, like high inflation, water scarcity, and worsening conditions for millions of small farmers. The fundamentals of Egypt's apparent success are not solid. At the same time, the government is developing ever closer ties with Russia and China, including in defence.

Egypt is surrounded by insecurity, the Sinai Desert, where armed groups operate, and Libya. Since the 2011 allied intervention and the death of strongman Gaddafi, the state structure in Libya has almost disappeared, turning the area into a corridor of crime, including human trafficking and slave trading, between the Sahel and the Mediterranean and, increasingly, a sanctuary for terrorist groups, including ISIS. Besides the domestic casualties, this situation imperils neighbouring countries and maritime trade. More incidents of piracy and cross-border operation of terrorist groups are likely.

Tunisia is one of the possible targets. This small country is the only remaining democracy in northern Africa, but very prone to radicalism and economically weak. A vast country, Algeria could become one of the main flashpoints in the region. A difficult political transition looms as the incumbent president holds on to power, despite growing opposition, rallying for influence in his own entourage, and there are severe economic problems. Of all the north African countries, Morocco appears the most stable, but with insecurity almost all around its borders.



Chart. State stability (on a scale of 100). Source: Calculations based on FSI.

The Atlantic Ocean

As the North Sea is a marginal sea of the Atlantic Ocean, Belgium is an Atlantic country. For many decades, we have considered security in the Atlantic Ocean as a given. The ocean was a highway for trade; not a security issue. Today, however, there is growing uncertainty about the intentions of the main Atlantic power, the United States of America, but also about the strength and position of the United Kingdom. Whatever the status of the UK might be with regard to the European Union, the country faces important internal economic and political challenges and could therefore be held back in its aspirations to be a global military actor.

Against that backdrop, Russia is making its return to the Atlantic Ocean and the North Sea. Its navy and air force are again more present, up to our national border. As the military capabilities of the Atlantic countries are strained, it is less self-evident that Russian submarines and intelligence collection ships will be kept track of. Moreover, China too is dispatching its navy more frequently into the Atlantic, where it has done joint exercises with Russia. On the other side of the Atlantic Basin, both Russia and China are challenging American dominance by establishing closer ties with various Latin American countries.

Poverty and political instability affect several countries around the Caribbean Sea. This includes European countries with overseas territory and exacerbates security threats such as drug trafficking to Belgian ports, but also indirectly by ship or plane via Highway 10 to western Africa. There, littoral countries are often incapable of preserving security at sea. Transatlantic trade in drugs, slaves, and arms coincides with piracy, enriches armed groups, provides an incentive to sustain conflict economies and undermines statehood.

The southern belt

European and US troops have prevented a terrorist takeover in the Sahel, the belt that runs from the Atlantic to the Red Sea, just south of the Sahara. They have pushed back terrorist groups including the Islamic State and Al-Qaida in various countries and halted rebel groups marching towards the capital of Mali. The presence of these troops remains crucial, but operating in this vast sea of sand is taxing. Without structural political and economic progress, it risks becoming a long-term burden, particularly because climate change risks agricultural production diminishing rapidly.

The Red Sea is the maritime gateway between Europe and Asia, channelling over half of Belgium's seaborne trade. The security situation in this sea is deteriorating. In the last few years, there have been several incidents of piracy. In Yemen, rebels respond to the superior military power of Saudi Arabia by disturbing shipping through Bab-el-Mandeb. Using anti-ship missiles, naval mines, and other weapons, even very large oil tankers are targeted. Peace in Yemen is unlikely to return soon. On the other side, littoral states like Eritrea and Somalia will continue to struggle with instability. While it is in the interest of the international community to jointly address this situation, competition between great powers around the Red Sea is growing, with China, Russia, Japan, and others developing military strongholds.

Large countries, including Saudi Arabia and Iran, have become more assertive, partly as a result of their ability to diversify partnerships among the main powers and partly to propagate nationalism to preserve the legitimacy of political elites against the backdrop of economic difficulties. If Saudi Arabia is by far the biggest military spender, Iran responds by means of asymmetric warfare, including missiles, weapons that threaten shipping through the Strait of Hormuz, and financing rebel groups throughout the region. As the West is winding down its presence in the Middle East, those regional powers, as well as Turkey, Russia, and China, are advancing. Countries like Iraq, Syria, and Yemen remain arenas of competition yet with different protagonists.

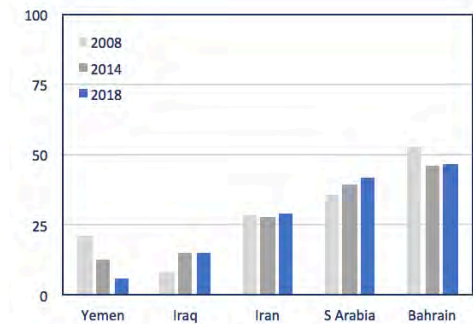


Chart. State stability (on a scale of 100). Source: Calculations based on FSI.

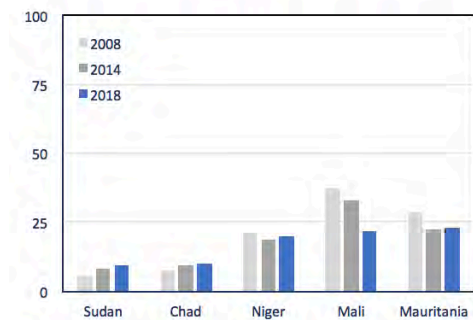


Chart. State stability (on a scale of 100). Source: Calculations based on FSI.

Why does stability in the Middle East remain so elusive? For decades now, the Middle East has been plagued by war. The situation often looks like a war of all against all. In such a **war trap**, many citizens are traumatized by violence, which leads to a permanent feeling of insecurity, the search for opportunities to improve one's security and to take vengeance. This fuels adversity, causes new traumas and makes the cycle continue.

Citizens are forced to become part of **conflicting parties**: states, terrorist groups, criminal gangs, and so forth. The same war trap also exists between these actors. Like individual citizens, such local actors try to enhance their security by embracing even larger actors, like Turkey, Israel, Saudi Arabia and Iran. The **regional powers** too are caught in a war trap as a result of the trauma of past conflicts. They seek opportunities for revenge or to fortify their position. The regional powers, finally, reach out to **global powers**, like China, Russia, and the US, which, on their turn are also captured in a conflict trap.

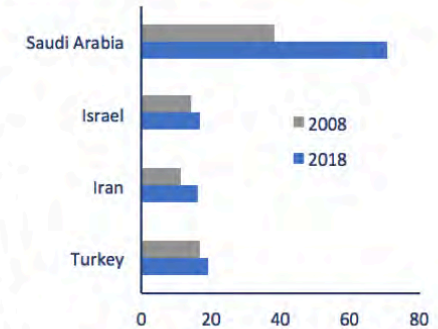
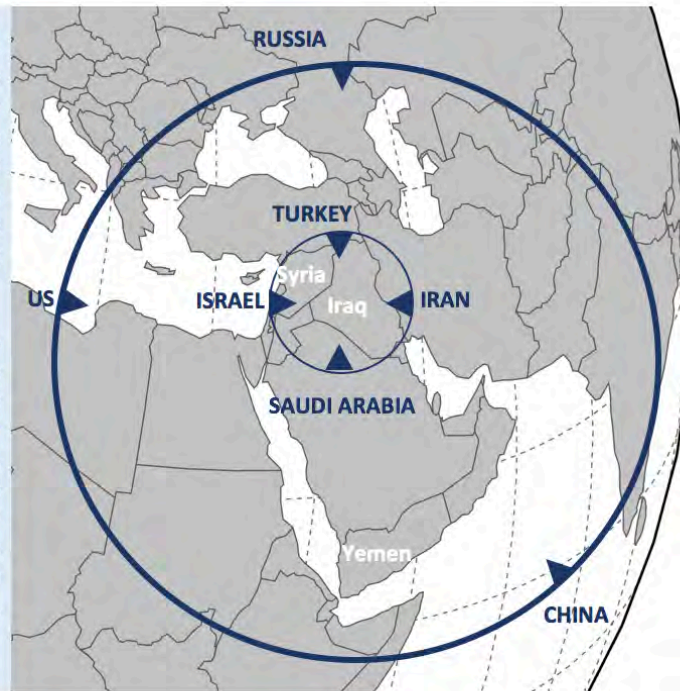


Chart. Military spending (US\$ billion).
Source: SIPRI.



Regional power rivalry: Regional powers often resort to various means to advance their position.

Proxy conflicts: In Iraq, Syria, Yemen and Lebanon, the regional powers, in different ways, support armed actors so as to preserve and advance their influence.



Direct intervention: Iranian troops intervened directly in Iraq and Syria; Saudi Arabia directly intervened militarily in Lebanon, Yemen, Bahrain; Israel in Lebanon and Syria; Turkey in Syria and Iraq.



Ballistic missiles: Israel's recent missile has a range of over 4,000 km, some of Iran's missiles have a range of over 2,000 km. Turkey and Saudi Arabia possess shorter range missiles and are working on new ones.



Nuclear deterrence: Israel is widely understood to possess nuclear weapons. Iran, for now has halted its nuclear programme, but retains relevant technology and knowledge. Saudi Arabia and Turkey work on civilian nuclear facilities.



Hedging: Israel, Turkey, Saudi Arabia enjoyed close relations with the US. In recent years, however, they also reach out to alternative partners for military and security cooperation: Russia and China in the first instance.



Sub-Saharan Africa and southern Asia

Beyond this, one of the most rapidly transforming regions consists of sub-Saharan Africa and southern Asia. The population in this area is growing by 5 million each year in a most difficult economic and environmental context. Despite some optimism, sub-Saharan Africa fails to catch up. In the last ten years, income per capita in this region has barely grown, unemployment has not decreased and key sectors that drive productivity, like manufacturing, have scarcely expanded. At the same time, the number of armed conflicts increased and the number of refugees in the region grew from 2 million in 2008 to over 6 million last year, with a very high risk of more instability in several countries.

In comparison, southern Asia has achieved somewhat more positive economic results, although income per capita remains very low, manufacturing growth remains a long way behind, and infrastructure is poor. India has the potential to become a major power, but its economy remains fragile, its political system fractured, and its society again more and more impaired by ethnic and religious divisions. Militarily, India is severely constrained by limited budgets. The situation in other countries, including Afghanistan, Pakistan, Nepal, and Bangladesh is and will remain unstable. Despite economic constraints, the military build-up in southern Asia continues. Competition between India and Pakistan, two countries that possess nuclear weapons, will persist.

Complicating the strategic landscape is the rivalry in and around the Indian Ocean, also an important transit zone for the maritime trade of our ports. If countries around the Indian Ocean have barely profited from globalization, external powers seek to secure their growing commercial interests. China is rapidly expanding its footprint all around the Indian Ocean Basin, including eastern Africa. Its navy has become more present and military cooperation with several countries is deepening. As the United States and Europe find it less and less obvious to preserve their military presence along strategically important sea lanes, such as the Gulf of Aden and the Bay of Bengal, China could emerge as a key new military power, sparking tensions with India.

Both sub-Saharan Africa and southern Asia will be hit very hard by climate change. Agricultural production could drop by 10 to 30 percent as soon as 2030.²⁰ This could lead to about 110 million climate refugees, on top of a regional internal migration that already involves around 30 million people.²¹ Governments and the international community are aware, but mitigation measures are only slowly being implemented. Consequently, famine could again spread. The population driven to impoverished and insecure urban slums in this region could reach 1.5 billion people by 2050.²² This will inevitably add to the migration pressure on Europe and undermine efforts to build stable states.

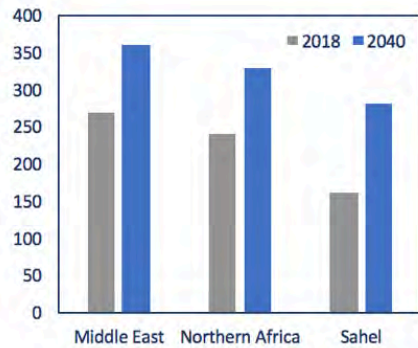


Chart. Population forecast (million, 2018 & 2040).
Source: UN, medium scenario.

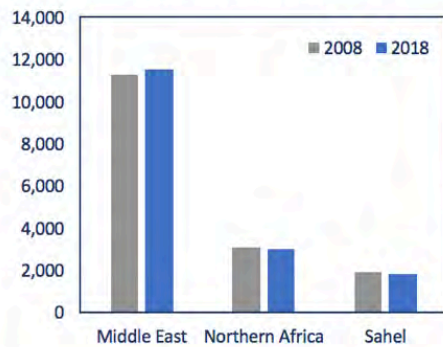


Chart. Gross domestic product per capita (constant US\$). Source: WDI.

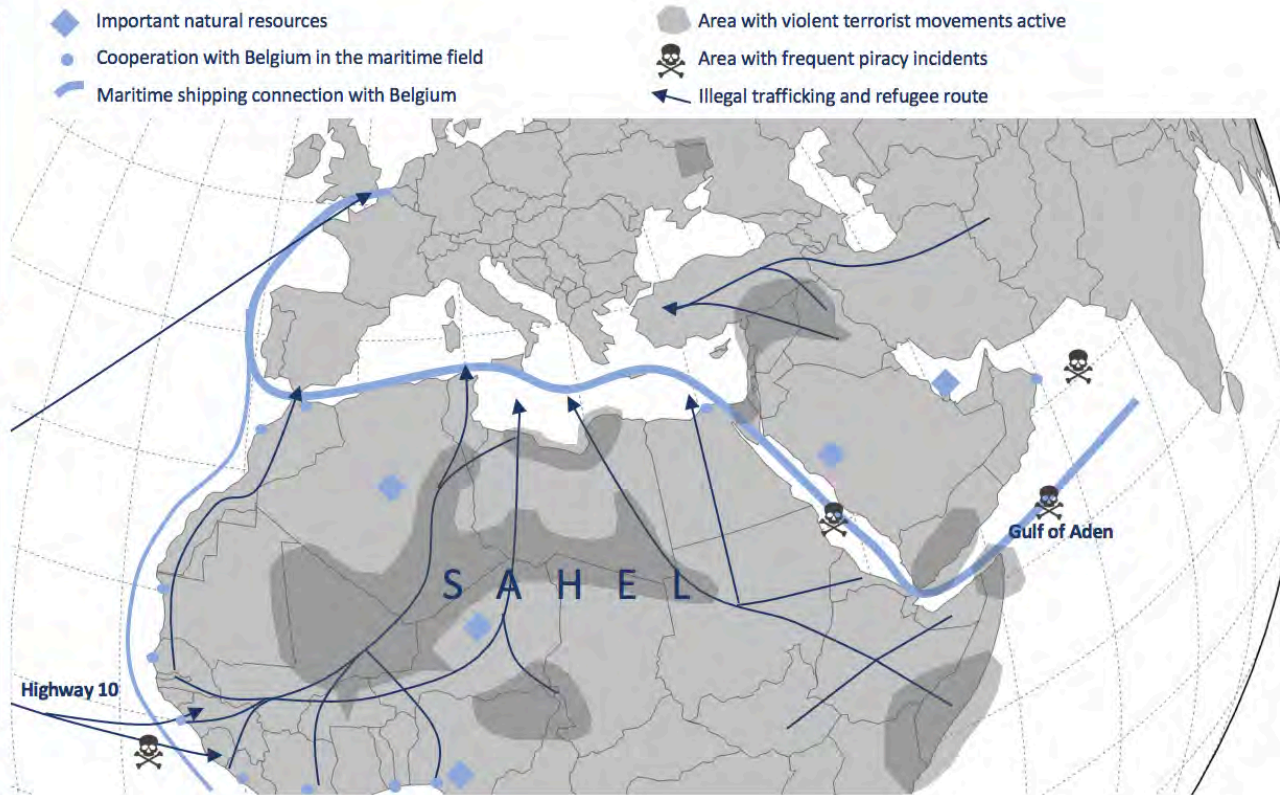


Figure: Security issues in the global south.

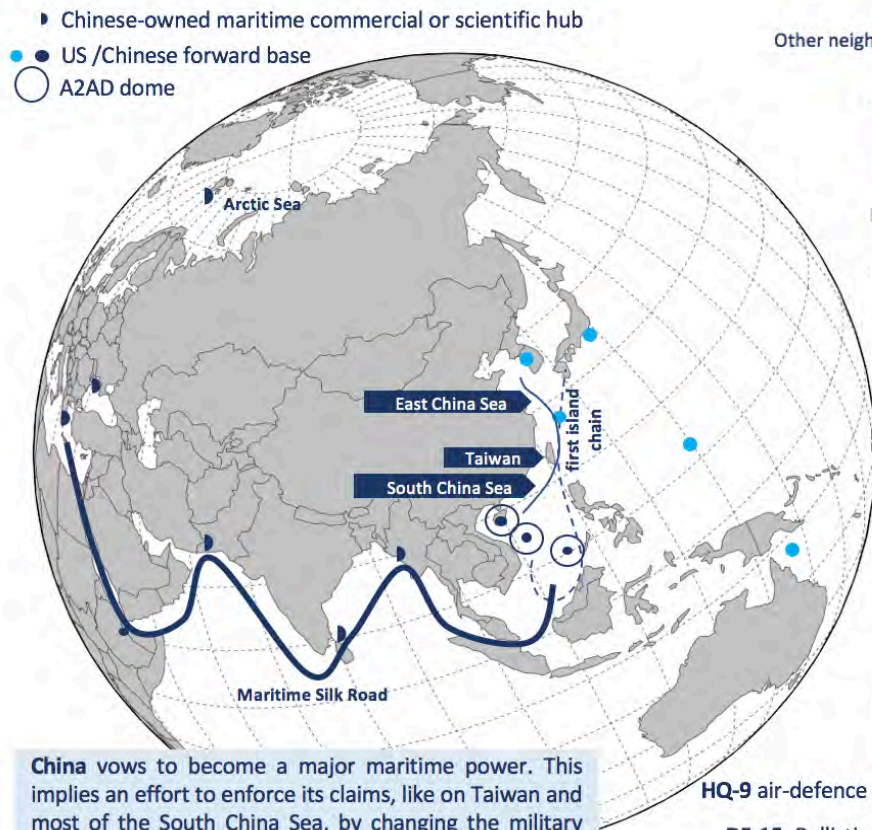
Asia-Pacific

Looking eastward, the rise of China as Asia's leading power has far-reaching consequences for the regional and global security outlook. In many ways, China remains a fragile power. A significant part of its population remains poor, its economy unbalanced, and the environmental challenges significant. Yet, most of its neighbours are either growing more slowly or are marred by more severe domestic challenges. China's share of Asia's economic production has grown from 14 percent in 2000 to 49 percent in 2018, and at the current growth rate could reach 57 percent in the next ten years.²³ China's share of Asia's defence spending is now 51 percent, meaning that it spends more on defence than its neighbours combined.

The security repercussions of China's ascent are manifold. China asserting its claims on Taiwan, adjacent seas and the contested border with India more assertively could lead to incidents and possibly armed conflicts. It remains to be seen how the United States will respond to China's challenge to its leadership. Growing distrust between the two powers already complicates international cooperation. It is clear that a new military arms race between the two is unfolding. This involves competition for military supremacy in the Pacific, exacerbates rivalry in space and cyberspace, and accelerates the development of new weapons, including all sorts of missile systems and unmanned combat vehicles. For the first time since the fall of the Soviet Union, countries must consider the prospect of a new major power war.

We are seeing the formation of a long Pacific front line, with lesser powers attempting to preserve their sovereignty and influence in between China and the United States. Regional tensions and great power politics are intertwined. From north to south, there is the territorial dispute between Russia and Japan, the uncertain outlook of North Korea as a nuclear power, tensions between China, Japan, and South Korea, partially over the East China Sea, Taiwan's struggle for autonomy, and the territorial conflicts in the South China Sea.

Unchecked, a rising China will also advance its interests more assertively beyond the Asia-Pacific region. The whole of Eurasia could turn into a single arena of great power competition. Countries like China, Russia, and Iran, despite mutual distrust, work together from the geographic centre, and are also challenging Western dominance in the maritime belt around Eurasia – from the Indian Ocean to the Arctic, and from the Atlantic to the Pacific. China also challenges some of our constitutional values. While China's leadership initially insisted that all politics should remain domestic, the current leadership suggests that its authoritarian system offers a new option for other countries.²⁴ This new competition blends geo-economics and geopolitics. It is about economic means to advance political power, and vice versa.



China vows to become a major maritime power. This implies an effort to enforce its claims, like on Taiwan and most of the South China Sea, by changing the military balance inside the **first island chain**. It has also begun altering the balance beyond, in the **Pacific Ocean**, by means of a blue water navy, advanced missiles, etc. This has alarmed Taiwan, Japan, and the United States. On the other hand, it seeks to secure its **maritime lifelines** via the Indian Ocean and takes an interest in the Arctic Ocean, the Atlantic, and the Mediterranean.

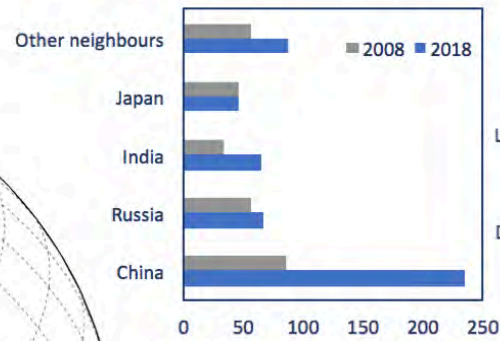


Chart. Military spending (US\$ bn). Source: SIPRI, WDI.

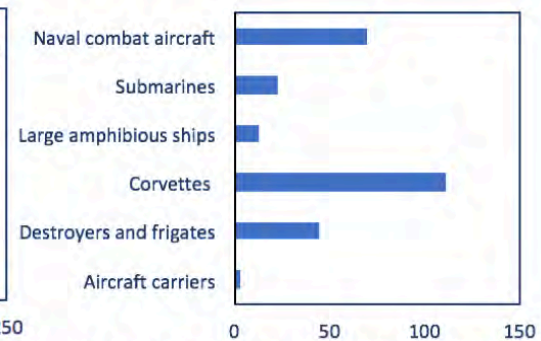
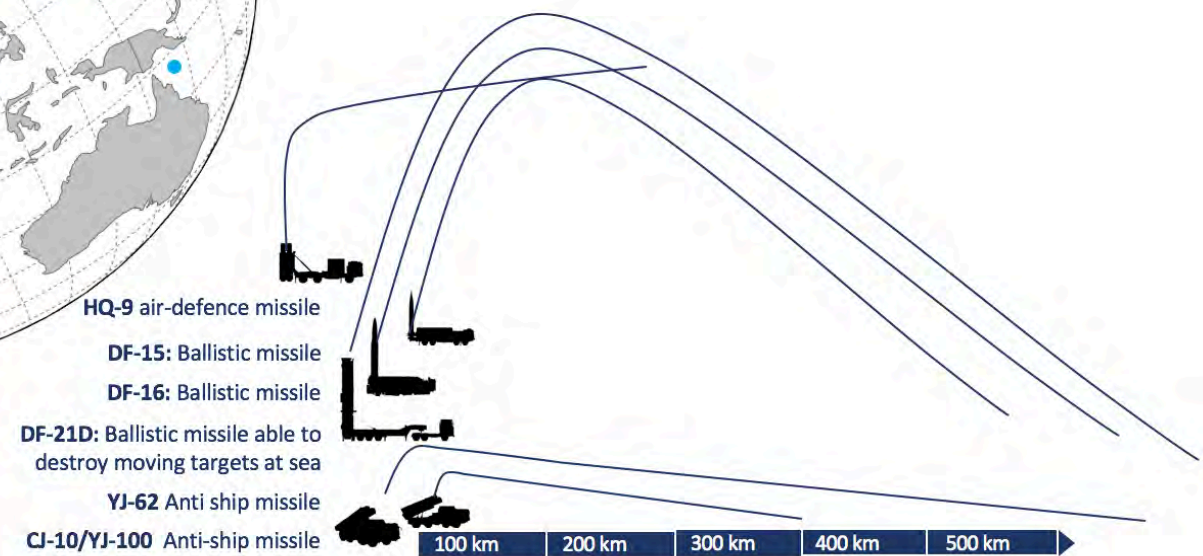


Chart. Estimated additions of Chinese weapon systems (2008-2018).



- HQ-9 air-defence missile
- DF-15: Ballistic missile
- DF-16: Ballistic missile
- DF-21D: Ballistic missile able to destroy moving targets at sea
- YJ-62 Anti ship missile
- CJ-10/YJ-100 Anti-ship missile

The United States

China's transition challenges the bedrock of US strategy, namely that the best way to preserve security is to preserve supremacy.²⁵ The challenge to American supremacy does not only come from outside, though. The US has significant advantages, like the world's most formidable military, a large economy, abundant natural resources, and technological leadership. But compared to those economic and military capabilities, the country suffers from social and political tension, including income inequality, racial discord, the proliferation of firearms, partisan tensions, and low levels of political trust. The American golden age of confidence that followed the defeat of the Soviet Union seems to have paused.

In terms of foreign policy, America has become more reluctant to engage internationally, to sacrifice freedom of action to sustain international rules, and to invest in its alliances. As the strategic focus is also shifting to the Asia-Pacific region, Europe is often left disorientated. Europe remains dependent on American military assets and it would be incapable nowadays of sustaining large military operations without American support. Yet there is uncertainty about America's intentions towards NATO, economic relations, Russia, the fight against terrorism and arms control.

Is America's insistence on larger European contributions to NATO and more balanced trade part of a transition period that will lead to a new beginning of a more resilient partnership, or will it be the beginning of the end of that partnership? Either way, it confirms the need for small countries like ours to be alert, to step up their own capability to keep track of changes in the world, to articulate their interests, and to indeed contribute more to making the transatlantic partnership balanced and strong. European countries need to respond to the fact that the Pacific will become more important to the United States and that Sino-American rivalry will only accelerate the race for economic and military innovation, with Europe in danger of being caught fragmented and weakened between these two giants.

This could be particularly manifest in more recent spheres of warfare, such as cyber and space. While the US has led the Internet revolution, China is working hard to reduce its reliance on American servers, chips, and software, but at the same time is rolling out its own Digital Silk Road. As regards cyberwar, the US government spends over US\$ 5 billion on military capabilities; and US\$15 billion on overall cybersecurity. In space, China now runs its own global navigation satellite network and competes with the US for new technologies like quantum communication, anti-satellite weapons, and space-based missile defence. The US spends at least US\$ 40 billion on space each year, of which around US\$ 11 billion is for military purposes (MFP-12); China spends around US\$ 14 billion and Europe around US\$ 13 billion.

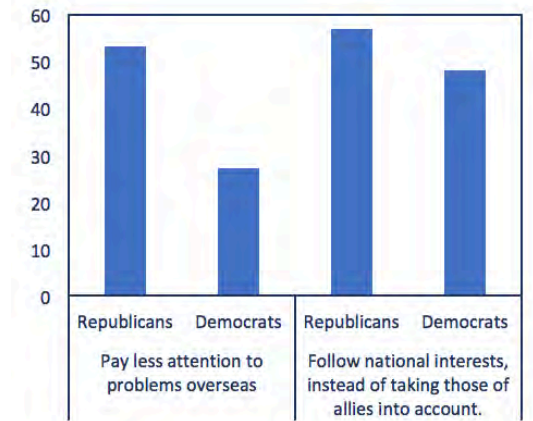


Chart. Partisan opinions on foreign policy issues (average for 2016 and 2017, %). Source: PEW

Cyber and space

If power at first depended on the ability to control land, it became more dependent on seas, airspace, and, more recently, on space and cyber. New spheres of competition do not replace others, but come on top of them. Cyber and space have become the focus of intense economic competition. While major powers advance connectivity through cyber and space, they also aspire to control and domination. On the one hand they support relevant companies, networks, and technical standards in the sphere of cyber and space to become global. On the other hand they pursue independence in terms of critical technology through protectionism and industrial policy.

In space, the European countries, together with the United States, enjoyed almost unrivalled leadership after the Cold War, but this position is slowly eroding. Other powers have developed their own systems for global navigation, communication, and intelligence gathering. Weaknesses exist in terms of the coverage, accuracy, and security of European satellites for government communication and intelligence. Countries like Belgium rely almost exclusively on commercial or partner countries' satellites, and the European Union as a whole still has significant dependence on American satellites. Concerns are growing about capabilities being developed to destroy, disturb, jam, or spoof the functioning of European satellites. In recent years, European satellites have been the target of hostile espionage and jamming activities.

While the European Union has been a trailblazer in rules for data security and the protection of data privacy, implementation and enforcement are not a given because of its very open market, the dominance of large external companies, the dependence on external technology, the fragmentation between governmental agencies, the fact that much of Europe's data is transferred via intercontinental cables to data centres abroad, and the enormous volume of such data. This is further complicated by the continued digitization of key commercial and governmental services, the promise of powerful 5G networks, and the expansion of the cloud. A lot of the information belonging to European companies and citizens is stored in overseas data centres and transferred through networks that are built or operated by foreign companies that have the duty to cooperate with the intelligence services of their home country.

A primary challenge for the protection of data security in the cybersphere is thus again a dependency on external suppliers and the difficulty of monitoring the entire network. There are numerous threats to our cybersecurity. Cyber-attacks can be active, with the aim of influencing or damaging systems, or passive, with the aim of collecting information. Attacks can be prepared in advance, by secretly building backdoors in the hardware or software, or through intrusion afterwards. The focus of such attacks ranges

from the smallest computer chip to circuit boards, servers, data centres, large networks, and the entire global internet. Every part is vulnerable, and the vast volumes of data makes attacks harder to detect. Even highly secured data centres have been infiltrated by means of infected computer chips. Systems that are physically isolated from unsecured networks, through what is known as an “air gap”, have proved vulnerable to attacks through USB sticks, sensors that are connected to them, by the capturing and transmitting of radio waves, sound waves, and electromagnetic signals. Cyber-attacks against protected, air-gapped systems can now literally happen wirelessly from the sky or any device near them, like an air-conditioning system or a basic telephone.

As it is increasingly difficult to protect and isolate data, it is also harder to encrypt them. Some countries require companies to have backdoors in their encryption as a condition of operating in their market. Artificial intelligence is used to crack encrypted data. As a result, countries are attempting to defend themselves against such attacks by means of quantum encryption. China has tested the first quantum communications satellite and has built a fibre-optic cable link for quantum communication between Shanghai and Beijing. The mastery of quantum technology will likely be decisive for cybersecurity.

The weaponization of the cybersphere casts a permanent shadow over our national security. National security is threatened indirectly through economic weakening. While cyber-espionage targets our valuable know-how, the failure to commercialize relevant know-how could render our country less well placed to spearhead future productivity gains. Cyber-espionage complicates our ability to influence external partnerships because counterparts might know more about our agenda than we know about theirs. Information wars through the cybersphere can also discredit the functioning of democracy by delegitimizing governments and distorting elections. Cyber-attacks can disturb social life and cause unrest, for instance through hate campaigns or by disturbing the functioning of government services and key economic assets such as airports, banks, and so forth.

Cyber-vulnerability also compromises the capability of the armed forces to defend the country. Just in the last few years, various incidents around the world have revealed how cyber-attacks can block or change the signals of radar systems, halt and distort the signal of global positioning, interfere with other military satellites, infiltrate into combat aircraft, steal sensitive data from warships, incapacitate army vehicles, hack into highly secured networks for military planning and missile defence, and so forth. The challenge is immense, with on the one hand the need for the armed forces to continue to contribute to the overall cybersecurity of our country and on the other hand the necessity to deter, prevent, detect, attribute, block, handle, and rapidly recover from cyber-attacks against specific weapon systems. This implies a permanent effort to be innovative and to aim for maximum efficiency through synergy with both domestic and external partners.



Photo: Drought in Africa. Credit: UN IRIN.

Complex security

Emerging from this global survey, first of all, are three important geographic vectors of uncertainty. One vector concerns the future of the global South, where a combination of rapid population growth against a backdrop of economic and political fragility will continue to cause severe challenges for Europe. A second vector concerns the transition of China. Despite its vulnerability, China's transition and initiatives like the New Silk Road once again turns Eurasia into a large arena of power politics. In this arena, Europe will find it less easy to secure its interests and will see countries like Russia hedge more assertively between the Eastern and Western ends of Eurasia. A third vector concerns the Atlantic community itself, in which the strategic reorientation of the United States, the uncertainty about the future course of the United Kingdom, and the fragility of the European project are challenging some of the bedrocks of Belgian security policy.

To none of these vectors of uncertainty will our country be immune, especially given that our own country is institutionally divided, faces economic challenges, and is looked at rather critically from outside. We are a fragmented country in a fragmenting world.

This is a security environment in which the non-state challenges, like migration, terrorism, and piracy, are unlikely to disappear. As the consequences of climate change come to be felt more widely and as the economic growth model seems to provide fewer benefits in terms of jobs and purchasing power, more states could face social unrest, political fragmentation, and radicalism. This is true for many countries surrounding Europe and for many countries inside Europe – including ours.

But how we address these challenges will be conditioned by the beginning of a new era of complex competition between major powers. It is complex because it often remains covert to our society as states compete quietly for economic and technological power and the first visible violent incidents have remained rather distant. It is also complex because it is capricious. Sometimes it looks as if states are becoming increasingly fragile; at other times they seem to be getting stronger. Sometimes we see populism and the politics of emotion; at other times we observe measured moves and counter-moves.

It is complex also because it is comprehensive. Security does not just entail military strength, but also technology, manufacturing, information, propaganda, and political legitimacy. It is complex, finally, because it does not seek to stop connectivity and communication, but to dominate it, in the digital domain, in space, but also in traditional continental, maritime, and airborne connections.

"We are a fragmented country
in a fragmenting world."

A complex security environment

Thematic analysis

Trend 1: Power shift: Weakening of the West, uncertainty about the intentions of rising powers.

Trend 2: Data explosion: Control of new IT shapes productivity and the balance of power.

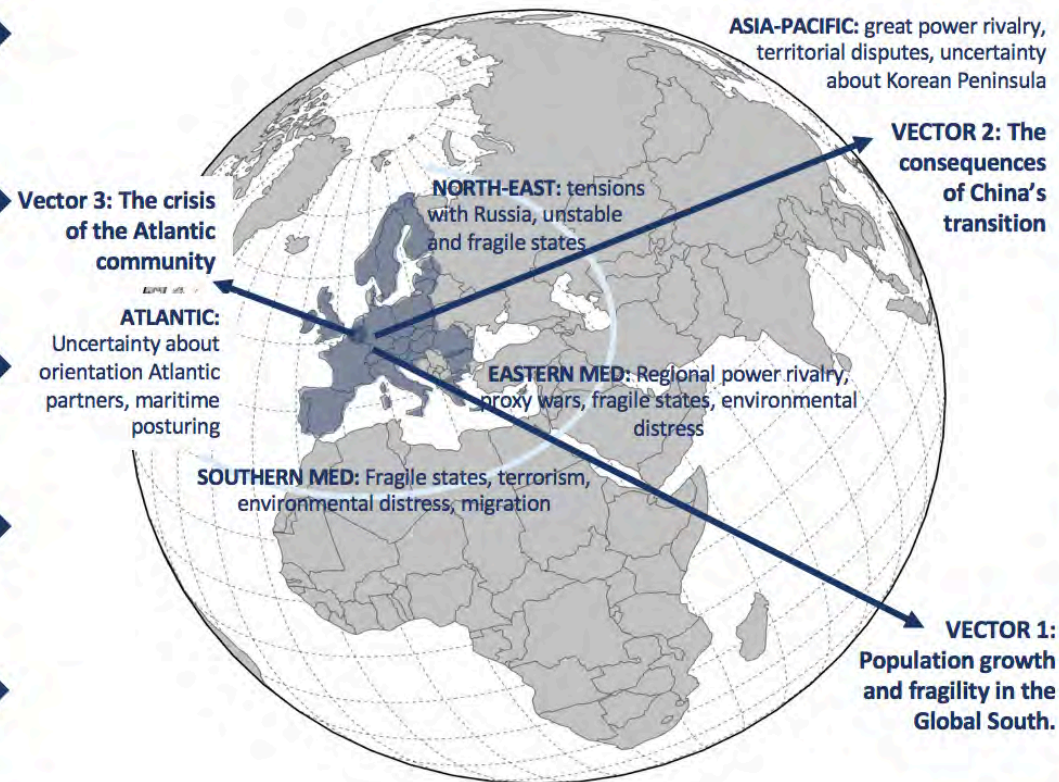
Trend 3: Economic and social stress: benefits of productivity gains unequally distributed

Trend 4: Environmental stress: Population growth, competition for resources, insufficient mitigation measures

Trend 5: Political fragmenting: crumbling of global governance, anarchy inside states and between states

Trend 6: Growing lethality: proliferation of very advanced weapons, new weapons of mass destruction, less control

Geographic analysis



A FRAGMENTED COUNTRY IN A FRAGMENTING WORLD

A comprehensive security policy

Balancing effectiveness and democratic diversity

Balancing critical public investments and citizens' private comfort

Balancing national interests and international cooperation

Balancing security challenges nearby and long-range power projection

Balancing the focus on peacetime security engagements and high-end threats

Balancing the focus on delivery and lethality

This poses small European countries like ours a number of difficult and fundamental choices. To begin with, our democracy seems to be at a disadvantage compare to authoritarian states when it comes to coordinating the different tools of comprehensive competition. The first need is thus to demonstrate that Western democracy can remain competitive without sacrificing its core constitutional values.

A second dilemma exists with regard to the growing need to preserve our security and all other necessities to preserve a cohesive, resilient, and dignified society. The challenge in this regard is not to prioritize, for instance, either security or schools, but to find the means to do the two at the same time, as growing the next generations depends as much on security as security depends on the education of the next generations. Statecraft is about doing many things effectively at the same time.

A third choice concerns international cooperation. Small countries like ours have a large stake in international cooperation and openness. Yet today's world shows that neither alliances nor organizations are immune to the consequences of nationalism and rivalry. This poses our country the challenge of continuing to invest in international cooperation, but also doing so through our own strength instead of just utilising the strength of others. What matters in international cooperation is not only the pursuit of strength, but how responsibly you use it.

A fourth quandary: geographic scope. Through trade, challenges, and partnerships, our interests are global and require the capacity of long-range power projection. But regional threats are imposing themselves much more pressingly in our neighbourhood and so there is a greater need to prioritize challenges closer to home. So, from that viewpoint, small countries have to find ways to contribute to robust capabilities for Europe to secure its extended neighbourhood and the main passages to that area, and by doing so to make itself more reliable and capable as an international actor, partner, and ally.

A fifth difficulty concerns the growing spectrum of security threats. On the one hand, states are deploying more lethal weapons. On the other hand, non-state actors, from terrorists to pirates, remain active. In the training of our military personnel, the acquisition of equipment, the development of our strategy, and the pursuit of international cooperation we need to guarantee sufficient adaptability to combine those tasks. One unavoidable discussion concerns the very top end of the spectrum of threats: nuclear warfare. As major powers modernize their nuclear weapons, Belgium will have to take a position on nuclear posture debates inside NATO, as well as on possible arms limitation initiatives.

A sixth tension: lethality versus the means of delivery. As technology advances rapidly, more emphasis is put on factors such as speed, range, accuracy, stealth, unmanned vehicles, autonomy, the degree to which platforms are networked, and so forth. These are certainly important. But defence, deterrence,

We should consider the many challenges as opportunities to defend what is dear to us and to safeguard the fruits of the sacrifices of previous generations - and to build on them.

and war also remain a matter of being lethal and maintaining the capability of inflicting damage on aggressors. Our capabilities have to strike the right balance.

The new world order leaves us no choices. However pressing and complicated many of the dilemmas might look, security requires us to oversee, coordinate, and strengthen many things at the same time. It is integral and comprehensive by default. The baseline, however, remains that any country, however large or small, can shape its future better, that it remains more effective, when it is cohesive and well organized, when its citizens are encouraged to give it their best, and when it maintains the ability to shape its own future. When it does these things it will also maintain the resilience to respond wisely to new security challenges.

Today, the position of our country remains rather fragile and many uncertainties for the future remain, in a time when the world as a whole is also becoming more turbulent. Peace and security cannot be taken for granted. But in those challenges we can also find, as part of the government, as soldiers, and as individual citizens, a unique opportunity to defend what is dear to us, to safeguard the fruits of the sacrifices of previous generations, to build on them, to uphold the values that were fought for in the past and that are enshrined today in our constitution, and to make this small country secure, prosperous, and benevolent.

Notes and references

- ¹ United Nations, Department of Economic and Social Affairs, Population Division, 2017. *Population Prospects: The 2017 Revision*. New York: UN. Note concerns zero-migration scenario.
- ² Plurilateral means one, often large, country taking the lead in advancing cooperation with a group of other states.
- ³ European Commission, 2018. *Spring 2018 Standard Eurobarometer*. Brussels: European Commission, 14 June 2018.
- ⁴ International resilience means the ability to limit and handle exposure to external vulnerabilities, such as dependence on supplies of goods, energy, and so forth.
- ⁵ Globalization Index.
- ⁶ Eurostat Statistical Database.
- ⁷ Eurostat Statistical Database.
- ⁸ World Bank, 2018. *Worldwide Governance Indicators*.
- ⁹ The OECD stated that the "complex political and institutional setting means that a consensus on economic issues is difficult to achieve", while the European Commission stressed the complexity of the Belgian Tax System. See: OECD, 2017. *OECD Economic Survey Belgium*. Paris: OECD, June 2017, p. 11; European Commission, 2018. *Commission Staff Working Document: Country Report Belgium*. Brussels: European Commission, 7 March 2018, p.3
- ¹⁰ International Monetary Fund, 2018. *Article IV Consultation Conclusions*. Washington: International Monetary Fund, 8 March 2018; International Monetary Fund, 2018. *Article IV Consultation Conclusions*. Washington: International Monetary Fund, 14 December 2018; OECD, 2017. *OECD Economic Survey Belgium*. Paris: OECD, June 2017; European Commission, 2018. *Commission Staff Working Document: Country Report Belgium*. Brussels: European Commission, 7 March 2018.
- ¹¹ *Economische Vooruitzichten 2018-2023*.
- ¹² European Commission, 2018. *Spring 2018 Standard Eurobarometer*. Brussels: European Commission, 14 June 2018.
- ¹³ Subjective poverty
- ¹⁴ Gokken is een miljardenbusiness in ons land, VRT, 10 January 2018.
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- ²⁰ UNEP, 2015. *Africa's Adaptation Gap*. New York: UNEP; FAO, 2016. *Climate change predictions in Sub-Saharan Africa: impacts and adaptations*. Rome: FAO; Laborde, David, et al. 2012. *Climate Change and Agriculture in South Asia*. Washington: World Bank; CDKN, 2018. *The IPCC's Fifth Assessment Report: What's in it for South Asia?* Delhi: CDKN.
- ²¹ World Bank, 2018. *Internal climate migration in Sub-Saharan Africa*. Washington: World Bank; UNCTAD, 2018. *Economic Development in Africa Report 2018*. Geneva: UNCTAD, chapter 2, pp 41-63.
- ²² UN HABITAT, 2014. *UN Habitat Annual Report 2014*. New York: UN, p. 15.
- ²³ World Bank, 2019. *World Development Indicators*. Note: Asia includes Southern and Eastern Asia.
- ²⁴ Xi Jinping at the 19th CPC National Congress, October 2017.
- ²⁵ White House, 2017. *National Security Strategy of the United States of America*. Washington: White House, p. 2-3.

“ Le bonheur est notre destin véritable.”
Jacques Brel